IN THE CLAIMS

1. (Currently Amended) An article comprising:

an electrical component, the electrical component being an electrical conduction winding, stator bar, or a stator piece; and

an electrically insulating layer disposed upon the electrical component, wherein the electrically insulating layer comprises a thermosetting polymer and a nanosized filler;

wherein the thermosetting polymer comprises polyurethanes, phenolics, silicones, polycarbonates, polystyrenes, polyesters, polyarylates, polyarylsulfones, polyethersulfones, polyphenylene sulfides, polysulfones, polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines, polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisoindolines, polydioxoisoindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycarboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes, or combinations comprising at least one of the foregoing thermosetting polymers;

wherein the nanosized filler consists essentially of particles having the formula (II)

$$(MeO)_x(Fe_2O_3)_{100-x} \qquad (II)$$

where MeO is any divalent ferrite forming metal oxide or a combination comprising two or more divalent metal oxides, and "x" is less than 50 mole percent, wherein the nanosized filler has an average largest dimension of less than or equal to about 200 nanometers, and wherein the nanosized filler particles are used in an amount of about 2 to about 15 wt% based on the total weight of the insulating layer; and

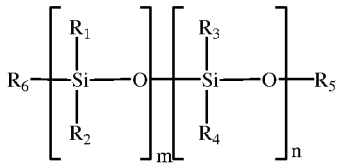
wherein the electrically insulating layer has a thickness of about 25 to about 300 micrometers and an electrical breakdown strength of greater than or equal to about 0.75 kilovolt.

2. (Original) The article of Claim 1, wherein the electrical component comprises copper.

3. (Original) The article of Claim 1, wherein the thermosetting polymers are homopolymers, copolymers, ionomers, dendrimers, or a combination comprising at least one of the foregoing polymers.

4. (Currently amended) The article of Claim 1, wherein the thermosetting polymer optionally further comprises ~~polyurethanes, epoxies, phenolics, silicones,~~ polyacrylics, ~~polycarbonates, polystyrenes, polyesters,~~ polyamides, polyamideimides, ~~polyarylates, polyarylsulfones, polyethersulfones, polyphenylene sulfides, polysulfones,~~ polyimides, polyetherimides, ~~polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines,~~ polypyromellitimides, ~~polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisoindolines, polydioxoisoindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycarboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes,~~ or combinations comprising at least one of the foregoing thermosetting polymers.

5. (Original) The article of Claim 1, wherein the thermosetting polymer has the structure (I)



(I)

wherein R_1, R_2, R_3, R_4, R_5 and R_6 are the same or different and wherein at least one of R_1, R_2, R_3, R_4, R_5 and R_6 is a reactive functionality prior to cross linking; m and n can be any integer including 0, with the exception that both m and n cannot both be 0 at the same time.

6. (Original) The article of Claim 5, wherein the sum of m and n is about 1 to about 50,000.

7. (Previously Presented) The article of Claim 5, wherein R_1, R_2, R_3, R_4, R_5 and/or R_6 are alkyl, aryl, aralkyl, fluoroalkyl, vinylalkyl, aminoalkyl, vinyl, epoxy, hydride, silanol, amine, carbinol, methacrylate, acrylate, mercapto, haloalkyl, halogen, carboxylate, acetoxy, alkoxy, or a combination comprising at least one of the foregoing functional groups.

8. (Original) The article of Claim 5, wherein the thermosetting polymer has a number average molecular weight of about 75 to about 500,000 g/mole prior to crosslinking.

9. (Original) The article of Claim 1, wherein the insulating layer comprises a thermosetting polymer in an amount of about 50 to about 98 wt%, based on the total weight of the insulating layer.

10. (Original) The article of Claim 5, wherein the thermosetting polymer is further mixed with a silane.

11. (Original) The article of Claim 10, wherein the silane is a chlorosilane, vinylsilane, vinylalkoxysilane, aklylacetoxysilane or a combination comprising at least one of the foregoing silanes.

12. (Canceled)

13. (Original) The article of Claim 1, wherein the nanosized filler is in the form of spheres, flakes, fibers, whiskers, or a combination comprising at least one of the foregoing forms.

14. (Canceled)

15. (Previously presented) The article of Claim 1, wherein Me represents a metal, and wherein the metals are iron, manganese, nickel, copper, zinc, cobalt, magnesium, calcium, or a combination comprising at least one of the foregoing metals.

16. (Original) The article of Claim 1, wherein the nanosized filler has the formula $Ni_{0.5}Zn_{0.5}Fe_2O_4$.

17-20. (Canceled)

21. (Canceled).

22. (Currently amended) The article of Claim ~~21~~1, wherein the insulating layer has an electrical breakdown strength of greater than or equal to about 1 kilovolt and is corona resistant to an applied voltage of 5000 Volts at a frequency of 3 kilohertz for a time period of greater than 100 minutes.

23. (Original) The article of Claim 21, wherein the insulating layer has an electrical breakdown strength of greater than or equal to the breakdown strength of the thermosetting polymer.

24. (Currently Amended) A method of manufacturing an article comprising:

disposing an electrically insulating layer upon an electrical component, wherein the electrically insulating layer comprises a thermosetting polymer comprising polyurethanes, phenolics, silicones, polycarbonates, polystyrenes, polyesters, polyarylates, polyarylsulfones, polyethersulfones, polyphenylene sulfides, polysulfones, polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines, polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisoindolines, polydioxoisoindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycarboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes, or combinations comprising at least one of the foregoing thermosetting polymers, and

a nanosized filler;

wherein the nanosized filler consists essentially of particles having the formula (II)

$$(MeO)_x(Fe_2O_3)_{100-x} \qquad (II)$$

where MeO is any divalent ferrite forming metal oxide or a combination comprising two or more divalent metal oxides, and "x" is less than 50 mole percent, wherein the nanosized filler has an average largest dimension of less than or equal to about 200 nanometers, and wherein the nanosized filler particles are used in an amount of about 2 to about 15 wt% based on the total weight of the insulating layer; and

curing the thermosetting polymer,

wherein the electrical component is an electrical conduction winding, stator bar, or a stator piece, and

wherein the electrically insulating layer has a thickness of about 25 to about 300 micrometers and an electrical breakdown strength of greater than or equal to about 0.75 kilovolt.

25. (Original) The method of Claim 24, wherein the insulating layer is disposed upon the electrical component by dip coating, spray painting, electrostatic painting, brush painting, spin coating or a combination comprising at least one of the foregoing methods.

26. (Currently Amended) The method of Claim 24, wherein the curing of the thermosetting polymer is conducted at a temperature of about 100 to about 250°C.

27. (Original) An article manufactured by the method of Claim 24.

28. (Currently Amended) An article comprising:

an electrical component, the electrical component being an electrical conduction winding, stator bar, or a stator piece; and

an electrically insulating layer disposed upon the electrical component, wherein the electrically insulating layer comprises a thermosetting polymer and a nanosized filler having an average largest dimension of less than or equal to about 75 nanometers;

wherein the thermosetting polymer comprises polyurethanes, phenolics, silicones, polycarbonates, polystyrenes, polyesters, polyarylates, polyarylsulfones, polyethersulfones,

polyphenylene sulfides, polysulfones, polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines, polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisoindolines, polydioxoisoindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycarboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes, or combinations comprising at least one of the foregoing thermosetting polymers;

wherein the nanosized filler comprises a mineral filler comprising asbestos, ground glass, kaolin, silica, calcium silicate, calcium carbonate, magnesium oxide, zinc oxide, aluminum silicate, calcium sulfate, magnesium carbonate, sodium silicate, barium carbonate, barium sulfate, mica, talc, alumina trihydrate, quartz, wollastonite or a combination comprising at least one of the foregoing mineral fillers;

wherein the nanosized filler is used in an amount of 0.01 to 30 wt% based on the total weight of the insulating layer; and

wherein the electrically insulating layer has a thickness of about 25 to about 300 micrometers and an electrical breakdown strength of greater than or equal to about 0.75 kilovolt.

29. (Previously Presented) The article of Claim 28, wherein the mineral filler is mica comprising phlogopite ($K\ Mg_3\ AlSi_3\ O_{10}\ (OH)_2$) or muscovite ($K_2\ Al_4\ [Si_6\ Al_2\ O_{20}]\ (OH, F)_4$)

30. (Currently Amended) An article comprising:

an electrical component, the electrical component being an electrical conduction winding, stator bar, or a stator piece; and

an electrically insulating layer disposed upon the electrical component, wherein the electrically insulating layer comprises a thermosetting polymer, and a nanosized filler having an average largest dimension of less than or equal to about 75 nanometers;

wherein the nanosized filler comprises nanosized metal oxides wherein the nanosized metal oxides comprise calcium oxide, cerium oxide, magnesium oxide, titanium oxide, zinc oxide, silicon oxide, copper oxide, or a combination comprising at least one of the foregoing metal oxides, nanosized metal carbides or a combination comprising at least one of the foregoing metal oxides and metal carbides;

wherein the thermosetting polymer comprises polyurethanes, phenolics, silicones, polycarbonates, polystyrenes, polyesters, polyarylates, polyarylsulfones, polyethersulfones, polyphenylene sulfides, polysulfones, polytetrafluoroethylenes, polyetherketones, polyether etherketones, polyether ketone ketones, polybenzoxazoles, polyoxadiazoles, polybenzothiazinophenothiazines, polybenzothiazoles, polypyrazinoquinoxalines, polyquinoxalines, polybenzimidazoles, polyoxindoles, polyoxoisoindolines, polydioxoisoindolines, polytriazines, polypyridazines, polypiperazines, polypyridines, polypiperidines, polytriazoles, polypyrazoles, polycarboranes, polyoxabicyclononanes, polydibenzofurans, polyphthalides, polyacetals, polyanhydrides, polyvinyl ethers, polyvinyl thioethers, polyvinyl alcohols, polyvinyl ketones, polyvinyl halides, polyvinyl nitriles, polyvinyl esters, polysulfonates, polysulfides, polythioesters, polysulfonamides, polyureas, polyphosphazenes, polysilazanes, or combinations comprising at least one of the foregoing thermosetting polymers;

wherein the nanosized filler is used in an amount of 0.01 to 30 wt% based on the total weight of the insulating layer, and

wherein the electrically insulating layer has a thickness of about 25 to about 300 micrometers and an electrical breakdown strength of greater than or equal to about 0.75 kilovolt.

31. (Previously Presented) The article of Claim 30, wherein the nanosized metal carbides comprise silicon carbide, titanium carbide, tungsten carbide, iron carbide, or a combination comprising at least one of the foregoing metal carbides.

32. (Previously presented) The article of Claim 30, wherein the nanosized metal oxide has the formula $Ni_{0.5}Zn_{0.5}Fe_2O_4$.

33. (Previously Presented) The article of Claim 1, wherein the nanosized filler has an average largest dimension of less than or equal to about 75 nm.